

Remarks

Applicant would like to thank the Examiner for discussing the sole remaining rejection in this case and discussing it with his supervisor. Based on those discussions, Applicant provides herewith amendments and remarks that should place this case in condition for allowance.

Claims 1-3, 10-12, 15-32, 36, 37, 42-45, and 75 were pending in the above-referenced application before entrance of the present Amendment. The Examiner has rejected all the pending claims. Claims 1 and 30-32 are amended in this Response; and claims 36-37 and 42-45 have been canceled. No new claims have been added. Support for the amendment to claims 1 and 30 can be found in original claim 8. Claims 31 and 32 have been amended to be consistent with independent claim 30. Applicant respectfully submits that no new matter is presented with these amendments. Applicant reserves the right to prosecute without prejudice in a future application subject matter removed from the claims by the Amendment submitted herewith.

Rejection under 35 U.S.C. § 112, first paragraph. The Examiner has rejected claims 1-3, 10-12, 15-32, 36, 37, 42,-45, and 75 under § 112, first paragraph, for lack of enablement. The Examiner maintains that the Applicant's claims are not enabled because the Applicant has not demonstrated success with the inventive system for therapeutic use. As discussed with the Examiner during the Telephonic Interview, Applicant does not believe this rejection is proper given the fact that the expanded cell populations provided by the claimed methods could be used for research purposes. Applicant has clearly demonstrated in the specification (see Example 3, starting on page 44 at line 21) and a subsequently filed Declaration from Dr. Scadden that the method of expanding hematopoietic cells is enabled and has actually been performed in his laboratory.

The claimed methods and the resulting cells are particularly useful for research purposes where stem cells are in high demand and in short supply. The "Background of the Invention" section of the present application actually points out that stem cells are important in research. See page 2, line 16, of the originally filed specification. This section goes on to point out how difficult it is to expand populations of stem cells without loss of their multipotentiality. Therefore, the Examiner is wrong to maintain that the claimed methods and cells are not enabled because the Applicant has not enabled a therapeutic use of the resulting cells. The expanded

cells are also useful for research purposes. Applicant respectfully requests that the rejection of these claims be removed.

The claims drawn to hematopoietic stem cells “with less than wild type p21 activity” are also fully enabled by the specification. Both working Examples 1 and 3 demonstrate cells with less than wild type p21 activity. Therefore, Applicant has clearly shown that such claims are enabled.

The pending claims are fully enabled by the specification. Applicant respectfully requests that the rejection for lack of enablement be removed. The pending claims are now in condition for allowance.

If it is believed that a telephone conversation would expedite matters, the Examiner is invited to contact the undersigned at (617) 248-5215. Although it is believed that there is no fee associated with this amendment, if Applicant is mistaken, please charge any fees to our Deposit Account Number: 03-1721.

Respectfully submitted,

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